# BRUHAT BANGALORE MAHANAGARA PALIKE

## YELAHANKA ZONE

***Name of the work:*** **Estimate for Improvements to Roads and Drains at Sahakaranagara and TANagara areas in Ward No. 08, Kodigehalli Sub Division.**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Estimate Cost: | | | | | 3000000.00 | |
| Sl. No | Description | Unit | No. | L | B | D | Qty | Rate | Amount |
| 1 | KSRRB 300-1. Earth work excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications complete as per specifications MORTH chapter 3. **Page No. 138 / Item No. 19.1/ PWD SR 2014-15** | Cum | | | | | | | |
| | Drain Desilting | | | | | | | | |
| | | | 2 | 175.00 | 0.45 | 0.35 | 55.13 | | |
| | | | 2 | 160.00 | 0.45 | 0.35 | 50.40 | | |
| | | | 2 | 185.00 | 0.45 | 0.35 | 58.28 | | |
| | | | 2 | 200.00 | 0.45 | 0.35 | 63.00 | | |
| | Berm Cutting | | | | | | | | |
| | | | 2 | 175.00 | 1.00 | 0.25 | 87.50 | | |
| | | | 2 | 160.00 | 1.00 | 0.25 | 80.00 | | |
| | | | 2 | 185.00 | 1.00 | 0.25 | 92.50 | | |
| | | | 2 | 200.00 | 1.00 | 0.25 | 100.00 | | |
| | Culvert | | 2 | 6.00 | 2.00 | 1.20 | 28.80 | | |
| | | | | | | | **615.60** | 75.60 | **46539.00** |
| | Basic Rate | 70.00 | | | | | | | |
| | Area Weightage @8% | 5.60 | | | | | | | |
| | **Total** | **75.60** | | | | | | | |
| 2 | Removing B.S Slab of Drain and stacking **Page No. 25 / Item No. 5.32 / PWD SR 2014-15** | Sqm | | | | | | | |
| | | | 2 | 175.00 | | 1.35 | 472.50 | | |
| | | | 2 | 160.00 | | 1.35 | 432.00 | | |
| | | | 2 | 185.00 | | 1.35 | 499.50 | | |
| | | | 2 | 200.00 | | 1.35 | 540.00 | | |
| | | | | | | | **1944.00** | 58.32 | **113374.00** |
| | Basic Rate | 54.00 | | | | | | | |
| | Area Weightage @ 8% | 4.32 | | | | | | | |
| | **Total** | **58.32** | | | | | | | |
| 3 | Refixing stone slabs of drains and pointing in C.M (1:3) **Page No. 25 / Item No. 5.33 / PWD SR 2014-15** | Sqm | | | | | | | |
| | | | Qty Vide Item No. 02 | | | | **1944.00** | 75.60 | **146966.00** |
| | Basic Rate | 70.00 | | | | | | | |
| | Area Weightage @ 8% | 5.60 | | | | | | | |
| | **Total** | **75.60** | | | | | | | |

| Sl. No | Description | Unit | No. | L | B | D | Qty | Rate | Amount |
|---|---|---|---|---|---|---|---|---|---|
| 4 | KSRB 4-1.3 : Providing and laying in position plain cement concrete of **mix 1:4:8 with OPC cement @ 180 kgs with 40mm** and down size graded granite metal coarse aggregates @ 0.85cum and fine aggregares @ 0.57 cum machine mixed, concrete laid in layers not, exceeding 15cms, thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1,4.2. **No. 12/ Item No. 4.3/ PWD SR 2014-15** | Cum | | | | | | | |
| | Culvert | | 2 | 6.00 | 2.00 | 0.15 | 3.60 | | |
| | | | | | | | **3.60** | 4847.04 | **17449.00** |
| | Basic Rate | 4488.00 | | | | | | | |
| | Area Weightage @8% | 359.04 | | | | | | | |
| | **Total** | **4847.04** | | | | | | | |
| 5 | KSRB 5.4-3: Providing and constructing granite / trap / basalt size stone masonry in **superstructure with cement mortar 1:6**, edges of stones chistle dressed in courses not less than 15 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications.KBS 5-1.13 **Page No. 23 / Item No. 5.12 / PWD SR 2014-15** | Cum | | | | | | | |
| | | | 2x2 | 6.00 | 0.60 | 0.90 | 12.96 | | |
| | | | | | | | **12.96** | 4773.60 | **61866.00** |
| | Basic Rate | 4420.00 | | | | | | | |
| | Area Weightage @ 8% | 353.60 | | | | | | | |
| | Total | **4773.60** | | | | | | | |
| 6 | KSRB 15.1.4: Providing ruled pointing to coursed stone masonry with cement mortar 1:4, 20 mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications cement mortar 1:4. **Page No. 109 / Item No. 15.4 / PWD SR 2014-15** | Sqm | | | | | | | |
| | | | 2x2 | 6.00 | | 0.90 | 21.60 | | |
| | | | | | | | **21.60** | 92.88 | **2006.00** |
| | Basic Rate | 86.00 | | | | | | | |
| | Area Weightage @ 8% | 6.88 | | | | | | | |
| | **Total** | **92.88** | | | | | | | |
| 7 | KSRB 4-1.6 : Providing and laying in position plain cement concrete of **mix 1:2:4 with cement @ 240 kgs with 20mm** and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregates @ 0.459 cum, machine mixed, concrete laid in layers not exceeding 15cms, thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM of machinery, curing complete as per specifications, specification. No. KBS 4.1,4.2. **No. 12/ Item No. 4.6/ PWD SR 2014-15** | Cum | | | | | | | |

| Sl. No | Description | Unit | No. | L | B | D | Qty | Rate | Amount |
|---|---|---|---|---|---|---|---|---|---|
| | Pointing | | 2 | 6.00 | 1.80 | 0.10 | 2.16 | | |
| | Ramp | | 2x2 | 6.00 | 1.00 | 0.15 | 3.60 | | |
| | | | | | | | **5.76** | 5327.64 | **30687.00** |
| | Basic Rate | 4933.00 | | | | | | | |
| | Area Weightage @ 8% | 394.64 | | | | | | | |
| | **Total** | **5327.64** | | | | | | | |
| 8 | KSRB 4.2.2 : Providing and laying in position **reinforced cement concrete of design mix M20 with OPC cement @ 320 kgs, with 20mm and down size graded granite metal**, coarse aggregates @ 0.878 cum and fine aggregates @ 0.459 cum with superplastisiser @ 3lts confirming to IS 9103-1999 reaffirmed-2008 machine mixed, concrete laid in layers not exceeding 15cms thick, vibrated for all works in foundation plinth and ground floor level for roof slabs, staircase, lintels, retaining walls, walls (any thickness) including attached plasters, column, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window cills, fillets etc, including cost of all materials, labour, HOM of machinery, curing, complete as per specifications. Specification No. KBS 4.1,4.6, **No. 13/ Item No. 4.11/ PWD SR 2014-15** | Cum | | | | | | | |
| | | | 2 | 6.00 | 1.80 | 0.23 | 4.97 | | |
| | | | | | | | **4.97** | 6065.28 | **30132.00** |
| | Basic Rate | 5616.00 | | | | | | | |
| | Area Weightage @ 8% | 449.28 | | | | | | | |
| | Total | **6065.28** | | | | | | | |
| 9 | KSRB 4.9.1: **Providing mild steel reinforcement for R.C.C work** including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost pf materials, labour, HOM of machinery complete as per specifications.Specification No. KBS 4.6.3 **Page No. 17 / Item No. 4.45 / PWD SR 2014-15** | Qtl | | | | | | | |
| | For Roof, Columns @ 90 Kg / Cum | | 0.90 | 4.97 | | | **4.47** | 7975.80 | **35661.00** |
| | Basic Rate | 7385.00 | | | | | | | |
| | Area Weightage @ 8% | 590.80 | | | | | | | |
| | Total | **7975.80** | | | | | | | |
| 10 | KSRB 4-6.4 : Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for **vertical surface such as walls at any thickness**, including attached pilasters, buttresses, plinth and string courses cost of all materials, labour complete as per specifications. Specification NO KBS 4.6.2 **Page No. 15 / Item No. 4.31/ PWD SR 2014-15** | Sqm | | | | | | | |
| | | | 2 | 6.00 | 0.60 | | 7.20 | | |

| Sl. No | Description | Unit | No. | L | B | D | Qty | Rate | Amount |
|---|---|---|---|---|---|---|---|---|---|
| | | | 2x2 | 6.00 | | 0.23 | 5.52 | | |
| | | | 2x2 | 1.80 | | 0.23 | 1.66 | | |
| | | | | | | | **14.38** | 292.68 | **4208.00** |
| | Basic Rate | 271.00 | | | | | | | |
| | Area Weightage @ 8% | 21.68 | | | | | | | |
| | **Total** | **292.68** | | | | | | | |
| 11 | KSRRB 500-3: Scarifying existing stone metal layer upto 75mm thick along with their bituminous surface, picking up scarified materials and stacking of old serviceable materials with lead of 100m, sequential spreading of the salvaged aggregates with fresh aggregates on prepared base and consolidating as per water bound macadam specifications including cost of all labour, HOM of machineries complete as per specifications. MORTH chapter 5, **No. 157 / Item No. 21.3 / PWD SR 2014-15** | Sqm | | | | | | | |
| | | | 2 | 175.00 | 1.50 | | 525.00 | | |
| | | | 2 | 160.00 | 1.50 | | 480.00 | | |
| | | | 2 | 185.00 | 1.50 | | 555.00 | | |
| | | | 2 | 200.00 | 1.50 | | 600.00 | | |
| | | | | | | | **2160.00** | 82.94 | **179159.00** |
| | Basic Rate | 76.80 | | | | | | | |
| | Area Weightage @ 8% | 6.14 | | | | | | | |
| | **Total** | **82.94** | | | | | | | |
| 12 | Providing, laying, spreading and compacting graded stone aggregate to **wet mix macadam** specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver in sub-base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications **Page No. 154 / Item No. 20.18 PWD SR - 2014-15.** | Cum | | | | | | | |
| | Kidzee School Road | | 2 | 175.00 | 1.50 | 0.15 | 78.75 | | |
| | Burial Ground Road | | 2 | 160.00 | 1.50 | 0.15 | 72.00 | | |
| | | | 2 | 185.00 | 1.50 | 0.15 | 83.25 | | |
| | | | 2 | 200.00 | 1.50 | 0.15 | 90.00 | | |
| | | | | | | | **324.00** | | |
| | Consider 10% for Road Cutting | | | | | | 32.40 | | |
| | | | | | | | **356.40** | 1438.56 | **512703.00** |
| | Basic Rate | 1332.00 | | | | | | | |
| | Area Weightage @ 8% | 106.56 | | | | | | | |
| | **Total** | **1438.56** | | | | | | | |

| Sl. No | Description | Unit | No. | L | B | D | Qty | Rate | Amount |
|---|---|---|---|---|---|---|---|---|---|
| 13 | KSRRB 500-1.1 : **Cleaning the existing WBM** road surface including removing of binding materials and other foreign matter with wire brushes and small picks, sweeping with brooms or soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM of machineries, curing complete as per specifications. Specification No. 500-1.3 **P. 157 / I. 21.1 PWDSR 2014-15** | Sqm | | | | | | | |
| | | | 1 | 175.00 | 6.00 | | 1050.00 | | |
| | | | 1 | 160.00 | 6.00 | | 960.00 | | |
| | | | 1 | 185.00 | 6.00 | | 1110.00 | | |
| | | | 1 | 200.00 | 6.00 | | 1200.00 | | |
| | | | | | | | **4320.00** | 12.20 | **52721.00** |
| | Basic Rate | 11.30 | | | | | | | |
| | Area Weightage @ 8% | 0.90 | | | | | | | |
| | **Total** | **12.20** | | | | | | | |
| 14 | KSRRB M500-6: **Providing and applying primer coat for surfaces of medium porosity** like cement stabilized soil base @ 1.10 Kg/Sqmt over prepared surface with S.S bitumen emulsion using bitumen tanker fitted with spray set (excluding cleaning of road surface) including cost of all material, labour HOM of machineries complete as per specifications. MORTH specification NO. 502, **Page No. 157 / Item No. 21.5 / PWD SR 2014-15** | Sqm | | | | | | | |
| | | | Qty Vide Item No. 06 | | | | 4320.00 | | |
| | Basic Rate | 69.00 | | | | | **4320.00** | 74.52 | **321926.00** |
| | Area Weightage @ 8% | 5.52 | | | | | | | |
| | **Total** | **74.52** | | | | | | | |
| | | | | | | | | | |
| 15 | KSRRB M500-18: Providing and laying **semi dense bituminous concrete** using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem roller to achieve the desired compaction as per MORTH specifications clause No. 508 complete in all respects as per specifications. **using 100-120 TPH capacity H.M.P with sensor paver grading II (25-30mm) with 5% CRMB-55 grade, No. 160 / Item No. 21.21.2 / PWD SR 2014-15** | Cum | | | | | | | |
| | | | 1 | 175.00 | 6.00 | 0.025 | 26.25 | | |
| | | | 1 | 160.00 | 6.00 | 0.025 | 24.00 | | |
| | | | 1 | 185.00 | 6.00 | 0.025 | 27.75 | | |
| | | | 1 | 200.00 | 6.00 | 0.025 | 30.00 | | |
| | | | | | | | **108.00** | | |
| | Consider 15% For Depression Filling | | | | | | 16.20 | | |
| | | | | | | | **124.20** | 11070.00 | **1374894.00** |
| | Basic Rate | 10250.00 | | | | | | | |
| | Area Weightage @ 8% | 820.00 | | | | | | | |
| | **Total** | **11070.00** | | | | | | | |

| Sl. No | Description | Unit | No. | L | B | D | Qty | Rate | Amount |
|---|---|---|---|---|---|---|---|---|---|
| 16 | Lead for Disposal of Debris shall be payable at carriage rates by Mechanical means inlcuding loading and unloading. From 0.00 to 2.00 Km ( Page No.123) | Cum | | | | | | | |
| | | | Vide Item No. 1 | | | | **523.26** | 73.57 | **38496.00** |
| | Average weight of earth 1.28 tonne / kg for 2x1.28x2.00=5.12 | 5.12 | | | | | | | |
| | Add loading and unloading charges Vide item no.17.1 P.no.130 | 63.00 | | | | | | | |
| | | **68.12** | | | | | | | |
| | Area Weightage @ 8% | 5.45 | | | | | | | |
| | **Total** | **73.57** | | | | | | | |
| 17 | Sub Total | | | | | | | | **2968787.00** |
| 18 | For Third Part QC inspection Charges @ 1% of Estimate Cost | | | | | | | | **29688.00** |
| 19 | Miscellaneous and other Charges | L/S | | | | | | | **1525.00** |
| | | | | | | | | **Total** | **3000000.00** |
| | **(Rs. Thirty Lakhs Only)** | | | | | | | | |

**CERTIFICATE:**

1 The work spot has been inspected and the work is found necessary.
2 This estimate is prepared as per PWD SR of 2014-15.
3 This work included under POW Grants 2014-15.
4 The provisions were made in this estimate are necessary and adequate.
5 This works come under B.B.M.P. limits.

Assistant Engineer

D.K. Makbul Ahmed
Assistant Executive Engineer
Bruhat Bangalore Mahanagara Palike
Kodigehalli Sub Division

Executive Engineer
Bruhat Bangalore Mahanagara Palike
Byatarayanapura Division

dministrative approval for Rs 3000000=00
Rs Thirty lakhs only
accorded under head P-1771
egistered as EE Nos. Subject
conditions contained enclosed memo.
o: ACY/AA/PR/1134/14-15 4.12.2014.
E/JE

Technical Sanction for Rs 3000000=00
Rs Thirty lakh only
P-1771
Registered as SE Nos. 08 Dated 22/12/14 Subject
to conditions contained enclosed memo.
No: 26 Dt. 22/12/14.
AE/JE
SE (BTP.Div.)

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ಯಲಹಂಕ ವಲಯ,
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ
ಬ್ಯಾಟರಾಯನಪುರ, ಬೆಂಗಳೂರು-92

Superintending Engineer
Yelahanka Zone
BBMP, Bangalore